| Subject | Year | Month |  |
| :---: | :---: | :---: | :---: |
| Mathematics | 10 | November | Balcarras |
| Topic: |  |  |  |
| Expressions and substitution into formulae |  |  |  |
| Content (Intent) |  |  |  |
| Prior Learning <br> Year 10 Algebra the basics October | Future Learning <br> Year 10 Solving equations March |  |  |
| Objectives <br> - Write expressions to solve problems representing a situation: <br> - Substitute positive and negative numbers into simple algebraic expressions: <br> - Substitute positive and negative numbers into expressions involving brackets and powers; <br> - Derive a simple formula, including those with squares, cubes and roots; <br> - Substitute numbers into a word formula or an algebraic formula; |  |  |  |
| Pedagogical notes (implementation) | How will understanding be assessed \& recorded (Impact) |  |  |
| Use formulae from mathematics and other subjects, expressed initially in words and then | End of half term Dec End of Year Year 10 exams in April |  |  |
| using letters and symbols. Hounder | How can parents help at home? |  |  |
| Include substitution into the kinematics formulae given on the formula sheet, i.e. $v=u+$ $a t$, $v^{2}-u^{2}=2 a s$, and $s=u t+\frac{1}{2} a t^{2}$. | MathsWatch clips (Qualification KS4)$7,95,137$ |  |  |
| Further reading/discussion |  |  |  |
| Reading / Enrichment <br> http://passyworldofmathematics.com/real-world- <br> mathematics-formulas/ <br> http://passyworldofmathematics.com/weight-training-mathematics/ | Literacy | Numeracy Links | Careers Links <br> Builder <br> cryptologist <br> astronomer <br> chemist <br> physicist <br> engineer <br> architect |

